FGDC U.S. Road Specification Working Group Update

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What and Why

- Detailing an explicit, comprehensive, and consistent definition of the features and attributes needed to model US Road Data

- The specification will…

  - foster data integration by making road information easier to share

  - Facilitate resource sharing by promoting the data centric development of related technologies
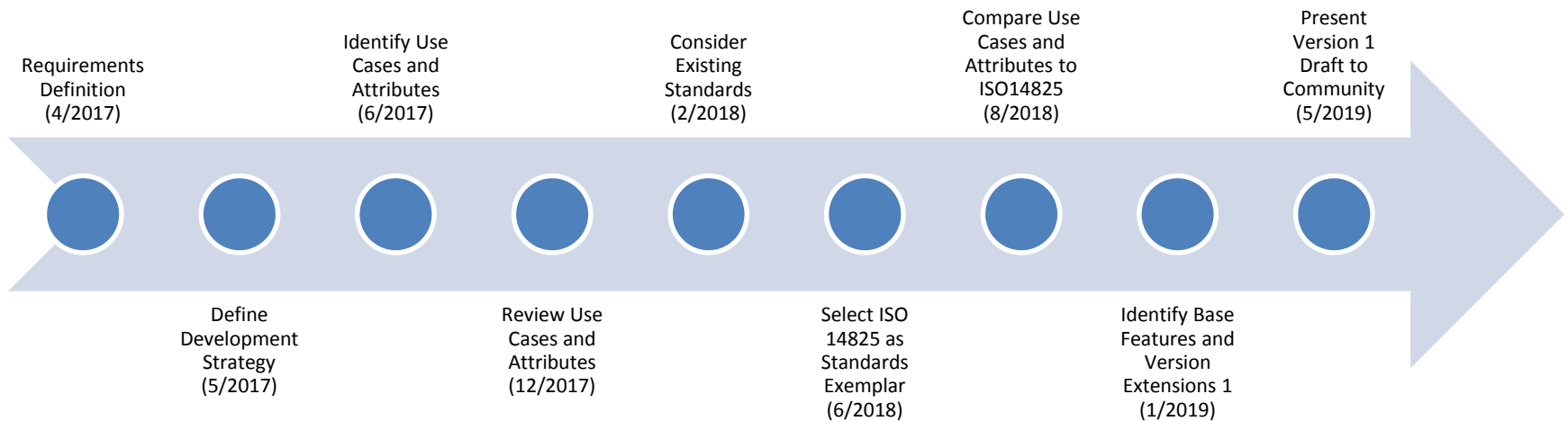
Development Strategy

- Market Driven Standards Development
- Diverse membership from all levels of government and industry
- **Consideration of** available resources
- Simplicity / Easy Adoption
- **Accommodation of** Multiple Missions
- Vendor and application independent

USRS Progression

Requirements Definition (4/2017)

Identify Use Cases and Attributes (6/2017)

Consider Existing Standards (2/2018)

Compare Use Cases and Attributes to ISO14825 (8/2018)

Present Version 1 Draft to Community (5/2019)

Define Development Strategy (5/2017)

Review Use Cases and Attributes (12/2017)

Select ISO 14825 as Standards Exemplar (6/2018)

Identify Base Features and Version Extensions 1 (1/2019)

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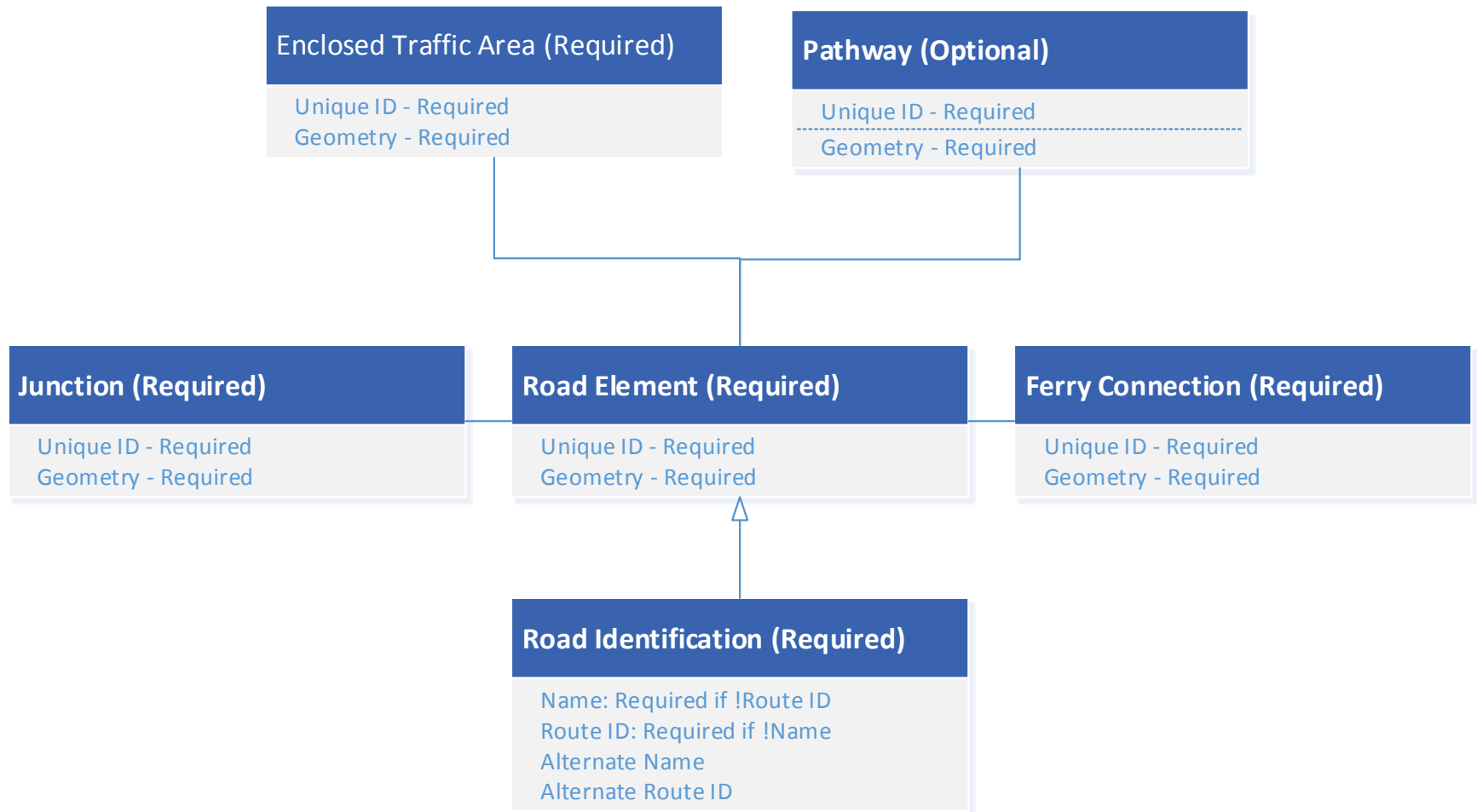**U.S. Department of Transportation**
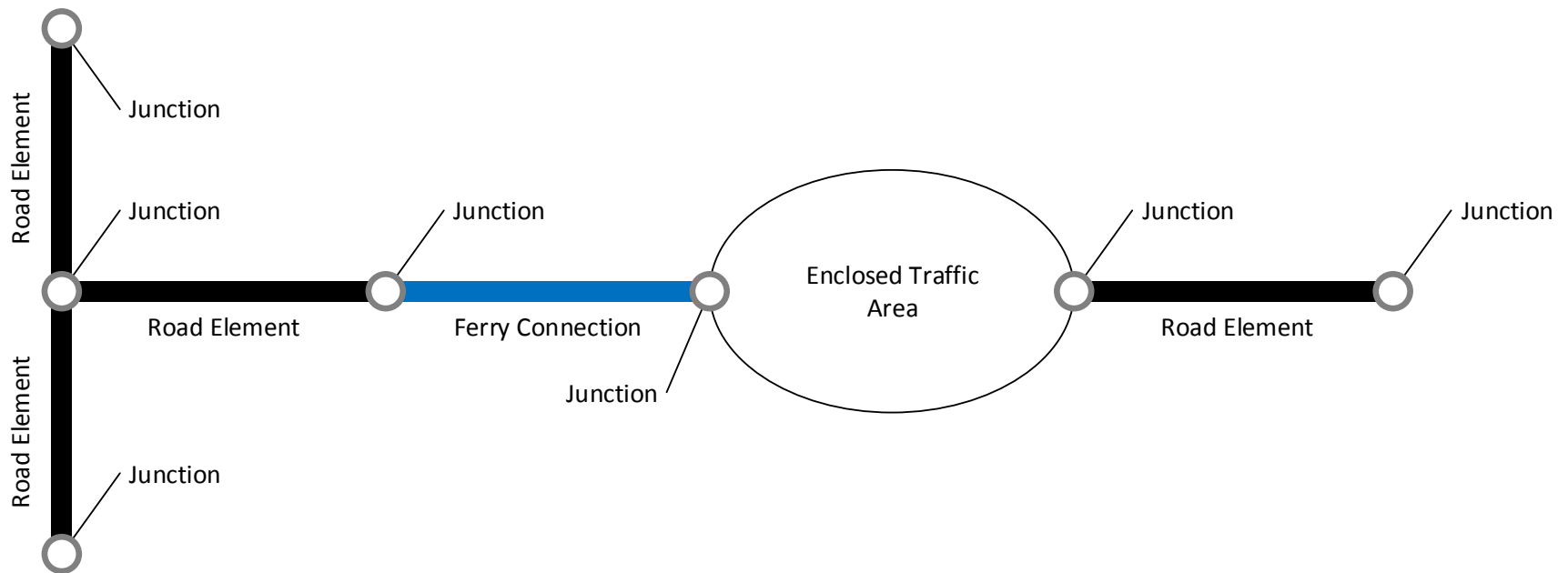
Object Oriented Development

- The base specification includes only essential features and attributes
  - Base features must be used by entire community
  - Base attributes must be used in the same way
- Features and attributes not in the base will be included as extensions to the base

Required Features and Attributes

Enclosed Traffic Area (Required)

Unique ID - Required
Geometry - Required

Pathway (Optional)

Unique ID - Required
Geometry - Required

Junction (Required)

Unique ID - Required
Geometry - Required

Road Element (Required)

Unique ID - Required
Geometry - Required

Ferry Connection (Required)

Unique ID - Required
Geometry - Required

Road Identification (Required)

Name: Required if !Route ID
Route ID: Required if !Name
Alternate Name
Alternate Route ID

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Example Features

Road Element

Junction

Road Element

Junction

Junction

Road Element

Junction

Junction

Ferry Connection

Junction

Enclosed Traffic Area

Junction

Road Element

Junction

Extensions Under Consideration

- Functional Road Class
  - USDOT, USGS, and Census use different functional classification systems
  - Model 3 Classifications Systems?
  - Can a "unified" road classification system be reached
- Address Ranges
- Display Classes
  - Enable Scale Dependent Rendering For Web Mapping
- Feature Level Metadata
  - Authority / Source, Vintage, Accuracy / Resolution

How to Participate

- Membership open to public and private road data providers and consumers

- USRS WG Web Site

  - https://communities.geoplatform.gov/ngda-transportation/u-s-road-specification/

Questions?

Thank You!

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